

ABSTRACT

An optical communications system and transmission section repair method is provided to prevent the dispersion value in an optical receive station from being affected when a transmission line has been obstructed, wherein a patch is made into the transmission line adjusted for dispersion in the relay section of the transmission line.

- 5 The transmission line includes positive dispersion fiber and negative dispersion fiber. The optical fiber used to patch the transmission line is an optical fiber where the absolute value of the dispersion is smaller than the dispersion value of the positive dispersion fiber or the negative dispersion fiber.